

REMARKS

Applicant appreciates the time taken by the Examiner to review Applicant's present application. This application has been carefully reviewed in light of the Official Action mailed May 28, 2008. Claims 1-26 were pending and rejected. Claims 1, 12, and 23 are amended herein. No new matter is introduced. Claims 9-11 and 19-22 are canceled herein. Thus, claims 1-8, 12-18 and 23-26 remain pending. Applicant respectfully requests reconsideration and favorable action in this case.

Examiner Interview

Pursuant to M.P.E.P. 713.09, an Applicant Initiated Interview Request Form was submitted on August 4, 2008. The Request was denied by the Examiner.

Objection to the Specification

The specification was objected to as failing to provide proper antecedent basis for the claimed subject matter. Specifically, the Examiner indicated that "computer readable medium" was not located in the specification by the Examiner. The Examiner's attention is respectfully directed to pages 17 and 48-49 of the specification. Paragraph 52 on page 17 of the specification describes, in part, that "computer program or its software components with such code may be embodied in more than one data processing system readable medium in more than one computer." Moreover, the term "computer readable medium" was well known in the art at the time of the invention. See, e.g., M.P.E.P. 2106(IV)(B)(1)(a), Rev. 1, Feb. 2003, page 2100-13 ("Office personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material."). Thus, the meaning of "computer readable medium" used in claims 12-22 is clearly apparent from the descriptive portion of the specification. Pages 48-49 of the Specification show that claims 12-22, as originally filed, recite "computer readable medium." Claims 12-22 are not new claims and "computer readable medium" was not added to claims 12-22 by amendment. Thus, the specification as originally filed provides proper antecedent basis for the claimed subject matter. See M.P.E.P. 608.01(l) and 608.01(o). Accordingly, withdrawal of this objection is respectfully requested.

Rejections Under 35 U.S.C. § 102

Claims 1-5, 8-16, and 19-26 were rejected under 35 U.S.C. §102(a) as being anticipated by U.S. Patent Application Publication No. 2006/0167927 ("Edelstein"). The rejection is respectfully traversed. Applicant maintains that the ontology model as described by Edelstein and the applied data model as claimed in claims 1-5, 8-16, and 19-26 are distinctly different data models implementing distinctly different query languages and thus require distinctly different searching methodologies. As a good faith attempt to expedite prosecution, independent claim 1 is amended herein to recite:

A method for searching an applied data model, comprising:
 translating a query to a set of statements operable to search the applied data model to an arbitrary level,
 wherein the applied data model is a representation of an arbitrarily complex environment and comprises at least one component and a relationship corresponding to the at least one component,
 wherein the at least one component represents a physical or logical entity in the arbitrarily complex environment,
 wherein the relationship represents an association between the physical or logical entity and other physical or logical entities in the arbitrarily complex environment, and
 wherein the query is a component query or a relationship query;
 searching the applied data model to the arbitrary level based on the set of statements translated from the query,
 wherein the query is in a first query language; and
 wherein the set of statements is capable of execution by a database management system supporting a second query language;
 producing a set of replies to the set of statements, wherein the set of replies includes at least one component or one relationship at the arbitrary level;
 and
 processing the set of replies according to the query.

Independent claims 12 and 23 are similarly amended.

In the rejection, the Examiner states that Edelstein is operable to search the applied data model to an arbitrary level, and points to Figure 9 for a representation of an arbitrarily complex environment. Applicant respectfully disagrees. Edelstein uses examples of searching an airline data model, a school data model, and an employee data model throughout his disclosure. Edelstein does not expressly or inherently describe these data models are for arbitrarily complex environments with physical as well as logical entities. It appears that the entities in each example and throughout Edelstein's disclosure are typically persons with similar, quantifiable properties (e.g., first name, last name, passport number). Contrastingly, an arbitrary complex environment such as an IT environment may include server computers and applications running on the server computers. These physical and logical entities usually have

dissimilar properties and the relationships between these physical and logical entities can dynamically and arbitrarily change.

Furthermore, Edelstein appears to be directed to a data descriptor system having a first storage medium, at least one data schema, a data source conforming to the at least one data schema, and a second storage medium including an ontology model. *See*, Edelstein, para. 28. Edelstein teaches a query expressed in an ontology query language as having three clauses. *See*, Edelstein, para. [0057]. To express such a query, Edelstein discloses a user interface having three fields corresponding to the three clauses. *See*, Edelstein, para. [0064]. In contrast, in embodiments as claimed in claim 1, a query language may support both component queries and relationship queries which are built with clauses and conjunctions. *See*, specification, para. [0100]. A clause is a statement that returns components or relationships based on criteria. *Id.* A conjunction may combine clauses or change the order in which a clause is evaluated. *Id.* An example of a syntax and vocabulary for such a query language is presented in Appendix C of the specification. It is respectfully submitted that Edelstein does not expressly or inherently describe at least the limitation of “translating a query to a set of statements operable to search the applied data model to an arbitrary level, wherein the applied data model is a representation of an arbitrarily complex environment and comprises at least one component and a relationship corresponding to the at least one component, wherein the at least one component represents a physical or logical entity in the arbitrarily complex environment, wherein the relationship represents an association between the physical or logical entity and other physical or logical entities in the arbitrarily complex environment, and wherein the query is a component query or a relationship query in a first query language.”

In view of the foregoing, it is respectfully submitted that Edelstein does not teach each and every element of claim 1. Thus, Applicant believes that embodiments as claimed in claim 1 and similarly in pending claims 2-5, 8, 12-16, and 23-26 recite subject matter not reached by Edelstein under 35 U.S.C. § 102(a). Accordingly, withdrawal of this rejection is requested.

Rejections under 35 U.S.C. § 103

Claims 6-7 and 17-18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Edelstein as applied to claims 5 and 16 above, and further in view of U.S. Patent No. 6,509,898 (“Chi”). The rejection is respectfully traversed.

The Examiner states that Chi teaches a breadth first graph search and that it would have been obvious to combine Chi's search with Edelstein. However, Chi also teaches using at least a two-pass search. Applicant respectfully submits that, at the time of the invention, there were no apparent reasons that would have motivated one of ordinary skill in the art to combine Edelstein and Chi.

Specifically, Chi teaches a search method in which representation of web pages (nodes) and hyperlinks (links) are displayed according to their importance. See, Chi, Col. 2, lines 30-31. A visitation order is determined by visiting the highest used nodes first. See, Chi, Col. 2, lines 51-52. A layout algorithm runs in two passes to place a node as close to the root node as possible and then use a disk-tree visualization technique. See, Chi, Col. 5, lines 7-25. Thus, Chi uses a two-pass search in which the first pass involves determining the usage of each web page to then determine how the second pass will be traversed. Furthermore, Chi teaches visiting nodes according to their usage, and a child node will be claimed by a more popular web page rather than by its less popular sibling which also has a hyperlink to the child node. See, Chi, Col. 2, lines 55-58. It is believed that Chi's teaching concerning the usage of certain web pages or hyperlinks may determine the position of a node in the graph but would not be helpful in a search of a complex IT environment in which a query may be formed to understand associations or dependencies between applications and machines in that complex environment.

As to the combination of Edelstein and Chi, Edelstein teaches a single pass search via an ontology model and Chi teaches a two pass search using completely different techniques. There were no apparent reasons that would have motivated one of ordinary skill in the art to modify Edelstein to use Chi's two-pass search that does not rely on Edelstein's ontology model. On the other hand, modifying Chi to use a single pass search as described by Edelstein would likely to have destroyed the primary purpose of Chi's disclosure. Thus, it is believed that there were no apparent reasons that would have motivated one of ordinary skill in the art to combine Edelstein and Chi.

For at least the foregoing reasons, Applicant respectfully submits that Edelstein and Chi, alone or in combination, fail to suggest embodiments as claimed in Claims 6-7 and 17-18. Accordingly, withdrawal of this rejection is requested.


CONCLUSION

Applicant has now made an earnest attempt to place this case in condition for allowance. Other than as explicitly set forth above, this reply does not include any acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests full allowance of Claims 1-8, 12-18, and 23-26. The Examiner is invited to telephone the undersigned at the number listed below for prompt action in the event any issues remain.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

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